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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,269	10/14/2003	Ming-Shi Tsai	Q1277	4908

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EXAMINER	
DUDA, RINA I	
ART UNIT	PAPER NUMBER
2837	

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

M'A

Office Action Summary	**Application No.** 10/685,269	**Applicant(s)** TSAI ET AL.	
	Examiner Rina I. Duda	**Art Unit** 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-10 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-10 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/24/06 has been entered.

Response to Arguments

2. Applicant's arguments filed 4/24/06 have been fully considered but they are not persuasive. In reference to applicant's arguments that the first resistor and the second resistor are not connected in parallel and that the second resistor/thermistor are not connected to ground, attention is directed to figure 2 where Van Brocklin et al clearly shows the thermistor connected in series to resistor 66 and in parallel to resistor 70 and the thermistor connected to ground through resistor 50/resistor 70 connected to ground through capacitor 46. Therefore, the rejections of claims 1-10 are maintained.

Claim Objections

3. Claims 4 and 9 are objected to because of the following informalities: claims 4 and 9 should depend on claims 2 and 7 respectively instead of 1 and 6 because claims 1 and 6 do not recite a third and fourth resistors. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 6, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Brocklin et al (US patent 6011371).

Claim 1, Van Brocklin et al describe a fan controller comprising a reference voltage output circuit connected to a power supply VCC, wherein said reference voltage is changeable according to ambient temperature detected by sensor 46 and includes a first resistor 66 connected to a thermistor 46 in series and connected to the second resistor 70 in an output end, one end of said second resistor 70 is connected to ground and one end of said thermistor is connected to ground through resistor 50; and a driving voltage control circuit including portions of means 42 and 44 which receives the reference voltage and controls the speed of motor 22 that operates fan 24, wherein said driving voltage is proportional to the reference voltage as described in column 3 lines 5-7.

Claim 2, Van Brocklin et al describe, a third resistor 52 having one end connected to the negative terminal of the power supply, a fourth resistor 50 connected to the third resistor, and a thermistor 46 connected to the fourth resistor and the negative terminal of the power supply though either resistors 66/70 or resistor 50, wherein the first resistor 66 is connected in between the fourth resistor and the thermistor and the second resistor is connected to the first resistor and ground.

Claim 6, Van Brocklin et al describe a fan controller comprising a reference voltage output circuit connected to a power supply VCC, said output circuits includes a thermistor 46 connected to a first resistor 66 in series and to a second resistor 70 in parallel and a driving voltage control circuit used to control the speed of fan motor 22, see figure 2.

Claim 7, Van Brocklin et al describe a third resistor 52 having one end connected to the negative terminal of the power supply, a fourth resistor 50 connected to the third resistor, and a thermistor 46 connected to the fourth resistor and the negative terminal of the power supply though either resistors 66/70 or resistor 50, wherein the first resistor 66 is connected in between the fourth resistor and the thermistor and the second resistor is connected to the first resistor and ground.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 3, 5, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Brocklin et al (US patent 6011371) and Dob et al (US patent 4734012).

Claim 3, the difference between the subject matter of claim 3 and the teachings of Van Brocklin et al is that claim 3 specifies that the second resistor is a variable resistor, Van Brocklin et al describes in column 7 lines 2-18 the values of the different resistors in the system plus they also state that the values and components of the system can be changed for other type of embodiments. Dub et al teach a speed controller for a fan motor comprising a reference voltage output circuit including several resistors in parallel and in series as well as a thermostat for sensing temperature; some of those resistors are variable resistor such as resistor 88.

Claim 8, the difference between the subject matter of claim 8 and the teachings of Van Brocklin et al is that claim 8 specifies that the second resistor is a variable resistor, Van Brocklin et al describes in column 7 lines 2-18 the values of the different resistors in the system plus they also state that the values and components of the system can be changed for other type of embodiments. Dob et al teach a speed controller for a fan motor comprising a reference voltage output circuit including several resistors in parallel and in series as well as a thermostat for sensing temperature; some of those resistors are variable resistor such as resistor 88.

Claims 5 and 10, Dob et al describe a capacitor connected to a driving circuit including line 70 for filtering the noise in the system.

Therefore, it would have obvious to include a capacitor and variable resistors to the system taught by Van Rocklin et al, since said elements would minimize the noise in the system and vary/adjust the desired speed of the fan motor respectively.

8. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Rocklin et al (US Patent 6011371) and Ohio (US patent 5043642).

The difference between the teachings of Van Rocklin et al and claims 4 and 9 is that claims 4 and 9 recite a transistor connected to the output of the operational amplifier included in the driving circuit. However, Ohio teaches a fan controller comprising a driving circuit including an operational amplifier 42 connected to a thermostat 39 for controlling the speed of the fan motor 41 and a transistor 8 having a base connected to the output of the operational amplifier 42, a collector connected to the positive power supply terminal 40, and an emitter for outputting a driving voltage for the fan motor.

Therefore, it would have obvious to one person of ordinary skill in the art to include a transistor in the system taught by van Brocklin et al, since said transistor would amplify the output of the operational amplifier.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rina I. Duda whose telephone number is 571-272-2062.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached at 571-272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RD

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PRIMARY EXAM